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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,140	02/11/2000	Tsunco Hayashi	SONY-T0130	6142

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ROBERT J. DEPKE LEWIS T. STEADMAN
HOLLAND & KNIGHT LLC
131 SOUTH DEARBORN
30TH FLOOR
CHICAGO, IL 60603

EXAMINER

TORRES, JOSEPH D

ART UNIT PAPER NUMBER

2133

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/503,140

Applicant(s)

HAYASHI ET AL.

Examiner

Joseph D. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,19,20,24 and 26 is/are pending in the application.
4a) Of the above claim(s) 24 and 26 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3,5-7,19 and 20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-3, 5-7, 19, and 20, of Invention 1, in the reply filed on 06/18/2004 is acknowledged.

Claims 24 and 26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/18/2004.

This application contains claims 24 and 26 drawn to a nonelected invention. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Response to Arguments

2. Applicant's arguments with regard to claims 1-3, 5-7 and 20 filed 12/19/2003 have been fully considered but they are not persuasive.

The Applicant contends, "there is no teaching nor suggestion whatsoever regarding either adjusting an amount of light transmitted from a laser diode used in reading the data, nor frequency of a signal that is superimposed or a signal applied to the laser diode or an amplitude of the signal that is superimposed on the signal applied to the laser diode".

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The Examiner disagrees and asserts that Hayashi teaches a control means for dynamically controlling and adjusting an amplitude of the signal superimposed on the signal applied to the laser diode (Note: claim 1 explicitly recites, "*a control means for dynamically controlling and adjusting an amount of light transmitted from a laser diode used in reading said data, or a frequency of a signal superimposed on a signal applied to the laser diode or an amplitude of the signal superimposed on the signal applied to the laser diode*" [Emphasis added])). Figure 7 and column 4 at lines 61-67 in Hayashi teach that system controller 29 in Figure 7 is a control means to increase the gain of the variable gain amplifier 30 via I/F circuit 26, thus increasing the amplitude of the RF signal (Note: pickup 12 reads an optical signal with an RF signal that was originally superimposed onto an optical signal during read and write operations, hence the RF signal is a signal superimposed on the optical signal applied to the laser diode for pickup 12). The Examiner asserts that Hayashi teaches a control means system controller 29 in Figure 7 for dynamically controlling and adjusting an amplitude of the RF signal superimposed on the optical signal applied to the laser diode of pickup 12.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "Similarly, in regard to claims 19 and 20, there is no teaching nor suggestion whatsoever regarding the dynamic adjustment of the gain of the photodiode as **described by Applicants in the present application**" [Emphasis added]) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

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specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Examiner disagrees with the applicant and maintains all previous rejections of claims 1-3, 5-7 and 20. All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 1-3, 5-7 and 20 are not patentably distinct or non-obvious over the prior art of record in view of the references, Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi), Takamine, Kouichi et al. (US 6240055 B1, hereafter referred to as Takamine), Lee, Woo-Nyun et al. (US 5930448 A, hereafter referred to as Lee) and Noguchi, Tatsumi et al. (US 5406429 A, hereafter referred to as Noguchi) as applied in the last office action, filed 06/13/2003. Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 20, 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi).

See the Non-Final Action filed 06/13/2003 for detailed action of prior rejections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 2, 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi) in view of Takamine, Kouichi et al. (US 6240055 B1, hereafter referred to as Takamine).
See the Non-Final Action filed 06/13/2003 for detailed action of prior rejections.
5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi) in view of in view of Lee, Woo-Nyun et al. (US 5930448 A, hereafter referred to as Lee).
See the Non-Final Action filed 06/13/2003 for detailed action of prior rejections.

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6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi) in view of Arai; Hiroshi (US 5862111 A).

35 U.S.C. 103(a) rejection of claim 19.

Hayashi teaches a recorder for recording data on a storage medium (See Abstract, System Controller 29 in Figure 7 and col. 4, lines 61-67 in Hayashi), comprising: a reading means for reading recorded data (see Pickup 12 in Hayashi); an error correcting means for correcting errors in data read by the reading means (Correction Circuit 16 in Figure 7 of Hayashi is an error correcting means for correcting errors in said read data); an error rate calculating means for calculating an error rate (Error Rate Counter 31 is an error rate calculating means for calculating an error rate of said errors in said read data); and a control means for dynamically controlling and adjusting one or more of the following recording characteristics (Figure 7 and col. 4, lines 61-67 in Hayashi teach the system controller 29 performs control to increase the gain of the variable gain amplifier 30 through the I/F circuit 26, thus increasing the amplitude of the RF signal): a frequency of a signal superimposed on a signal applied to the laser diode; or a speed of said recording medium wherein the adjustment occurs while reading user data from the disc in response to the bit error rate exceeding a predetermined value (Step 134 of Figure 125 in Hayashi is a means for dynamically controlling and adjusting the speed of said recording medium wherein the adjustment occurs while reading user data from the disc in response to the bit error rate exceeding a predetermined value,

Note: only one of the statements connected by or logic is required to be true in order for the statement to be true).

However Hayashi does not explicitly teach the specific use of adjusting an amount of light transmitted from the laser diode.

Arai, in an analogous art, teaches use of adjusting an amount of light transmitted from the laser diode (see abstract in Arai).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hayashi with the teachings of Arai by including use of adjusting an amount of light transmitted from the laser diode. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of adjusting an amount of light transmitted from the laser diode would have provided the opportunity for adjusting an amount of light transmitted from the laser diode based on focus error signal FE and a track error signal TE (col. 1, lines 40-55, Arai).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph D. Torres, PhD
Primary Examiner
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